

KSC LAUNCH OPERATIONS DIRECTIVE NO. 19

To: Distribution

From: Rocco A. Petrone
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Subject: TRANSFER PREPARATIONS AND HOUSEKEEPING FOR THE
MOBILE LAUNCHERS AND MOBILE SERVICE STRUCTURE

1.1 PURPOSE

The purpose of this directive is to establish responsibilities and instructions for transfer preparations and housekeeping of the Mobile Launchers and the Mobile Service Structure.

2.1 SCOPE

This directive covers securing and storage of equipment, also cleaning and inspection of the Mobile Launchers (ML), Mobile Service Structure (MSS) and associated equipment at Launch Complex 39.

3.1 RESPONSIBILITIES

3.1.1 Organizational elements within the Launch Operations Directorate are assigned specific areas, by the latest revision of LOD NO. 12, on the Mobile Launchers and Mobile Service Structure.

3.1.2 The organizational element assigned a given area is responsible for all conditions existing within that area including housekeeping, safety, and the general well-being of the area. Reassignment of the area to stage contractors is permissible.

3.1.3 The tenant organization will insure that each area is properly cleared and secured at all times. Routine walk-throughs of the assigned areas by the tenant is mandatory to insure against possible hazards or inadequate housekeeping practices.

4.1 INSTRUCTIONS

4.1.1 Cable Tray Covers removed from the cable trays on the ML will be stored in the base of the ML under the stairway (near elevator shaft) on the B Level if they are to be removed overnight. The Cable Tray Covers stored on Level B will be identified by the user prior to storage. All Cable Tray Covers

shall be replaced when a task is completed and prior to transfer to the Pad.

4.1.2 The use of Manila/Hemp rope on the ML and MSS is prohibited at the Pad. Nylon, dacron, or mylar ropes may be used.

4.1.3 Nuts, bolts, washers, brackets, straps, etc., are to be stored in non-flammable containers. NO LOOSE ITEMS WILL BE PLACED ON CABINETS, OIS BOXES, OR SIMILAR LOCATIONS.

4.1.4 K-Bottles will be secured at all users locations in approved racks. K-Bottle caps will be secured by chain, or wire rope, when not affixed to the bottle.

4.1.5 Trash cans and lids will be secured to the structure by chain.

4.1.6 Desks, chairs, bookcases and other office equipment will only be used in designated office areas.

4.1.7 Non-fire proof items will not be stored on the ML or MSS unless concurrence is obtained from the Fire Department.

4.1.8 Cable trays, consoles, storage racks (tops and insides) and similar areas will not be used for temporary storage or trash disposal.

4.1.9 All Cable Connector Covers (Dust Caps) will be secured to the cable or distributor with chain or wire rope.

4.1.10 Eating and drinking (except at water fountains) on the Mobile Launcher and Mobile Service Structure is prohibited except in the area designated as an eating location (ML Room 14AB).

4.1.11 All vehicles parked inside the pad perimeter fence will have its key left in the ignition at all times.

4.1.12 Each organization assigned an area on the MSS or ML will be held responsible for keeping the area clean. Normal industrial housekeeping practices will be followed in all areas.

4.1.13 Ladders, scaffolds and other equipment will require temporary storage permits and will be removed from the structure immediately upon completion of a task.

4.1.14 Temporary and permanent stored items will be in accordance with regulations defined in Attachment 1.

4.1.15 Literature of a non-technical nature will not be brought onto the ML or MSS when positioned at any location.

5.1 INSPECTIONS

LO will make random inspections of the MSS and ML. Additional LO inspections will be made prior to major tests and 12 hours prior to any transfer. Discrepancies will be listed and the responsible organizations will be notified for corrective action.

6.1 READINESS FOR TRANSFER

Spacecraft, Launch Vehicle, Technical Support, and Safety will each submit a letter of readiness to move to the Test Supervisor at least 12 hours prior to ML or MSS transfer. This letter will state the organization's readiness to move at the specified time and will verify that everything is secured and cleaned in each area of responsibility. The letter will list any constraints, other than normal transfer preparations, that would effect the start of transfer at the scheduled time.

END OF DIRECTIVE

CONTROL OF ML AND MSS STORED ITEMS

1.1 TEMPORARY STORAGE PERMIT POLICY

Storage Permits are required for any materials or equipment, such as ladders, work benches, dollies, scaffolding, work floats, furniture carts, drums of various fluids, reels of cable, pipe, boxes and/or crates of material or parts, "K" bottles, etc., that are required to accomplish a specific test or task while on the Mobile Launcher or Mobile Service Structure. Storage permits will not be required for the above type items if utilization is less than 48 hours. Storage permits are not required for operational GSE test equipment that has a contractor identification tag attached.

A storage permit is required at all times for flammable or hazardous materials.

The purpose of the permits is to control materials and equipment in the above areas and to be able to readily identify the user when it becomes necessary to have stored items removed.

1.2 DURATION OF PERMITS

Temporary storage permits will normally be limited to 30 days.

1.3 TEMPORARY STORAGE PERMITS

DIS will issue temporary storage permits for all temporarily stored items in the ML and MSS. Items found in these areas without a temporary storage permit will be removed by DIS.

The temporary storage permit consists of the following:

- a. Type of material
- b. Location
- c. Company
- d. Expiration date
- e. Requestor and phone number
- f. Authorizing signature, Complex Support Office (As Applicable)
- g. Authorizing signature, LV, LS, TS, IS (As Applicable)
- h. Authorizing signature, Fire Inspector (As Applicable)

TEMPORARY STORAGE PERMIT

TYPE OF MATERIAL _____
LOCATION _____
COMPANY _____ EXPIRATION DATE _____
REQUESTOR _____ PHONE _____

COMPLEX SUPPORT OFFICE (AS APPLICABLE)

LV, LS, TS, IS SIGNATURE (AS APPLICABLE)

FIRE INSPECTOR SIGNATURE (AS APPLICABLE)

FRONT SIDE

TEMPORARY STORAGE PERMIT

REQUESTORS CERTIFICATION

I CERTIFY THAT PERMIT BEING ISSUED (SEE
REVERSE SIDE) IS FOR AN ITEM THAT DOES
NOT CONTAIN FLAMMABLE AND/OR HAZARDOUS
MATERIAL.

REQUESTOR COMPANY PHONE NO.

REAR SIDE

1.4 PROCUREMENT OF TEMPORARY STORAGE PERMITS

The Requestor will procure temporary storage permits from IS-TSM
Duty Officer located in Room 1P25, LCC (24 hour daily service).

1.5 INSTRUCTIONS

1.5.1 Entries on the Temporary Storage Permit for the following
will be filled in by the Requestor:

- a. Type of material
- b. Location
- c. Company
- d. Expiration date
- e. Requestor and phone number

1.5.2 Requestor will have applicable LV, LS, TS, IS authentication signature affixed for permission to store items on the ML and MSS. LV, LS, TS and IS will submit a list (and keep updated) of names to LO who are authorized to approve a storage permit.

1.5.3 Requestor will have KSC Fire Inspector signature affixed for permission to store flammable, or hazardous materials, on the ML and MSS.

1.5.4 Requestor will affix his signature to the Requestors Certification on rear side of the permit for all non-flammable or hazardous materials.

1.5.5 Requestor will attach temporary storage permit to stored item in a conspicuous location.

2.1 PERMANENT STORAGE

Items which remain on the ML during launch but are not part of design prints, will have a permanent identification label attached to the item in a conspicuous place by the tenant organizations.

The permanent identification label (gummed, press on type) will be typed and will consist of the following:

- a. Item name
- b. Location (ML No., Room No., Level)
- c. Company
- d. Responsible person and phone number
- e. Authorized signature, DTS

Permanent identification labels will be required for all desks, chairs, bookcases, etc.